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### (54) Methods for generating polynucleotides having desired characteristics by iterative selective and recombination

(57) The present invention relates to a method for evolving a polynucleotide encoding a plurality of genes, e.g. multiple genes forming a multicomponent pathway. The method involves shuffling of polynucleotides by conducting a polynucleotide amplification process on overlapping segments of a population of variants of a polynucleotide encoding a plurality of genes under conditions whereby one segment serves as a template for extension of another segment to generate a population of recombinant polynucleotides. This population is screened for a recombinant polynucleotide encoding a plurality of genes having a desired property.

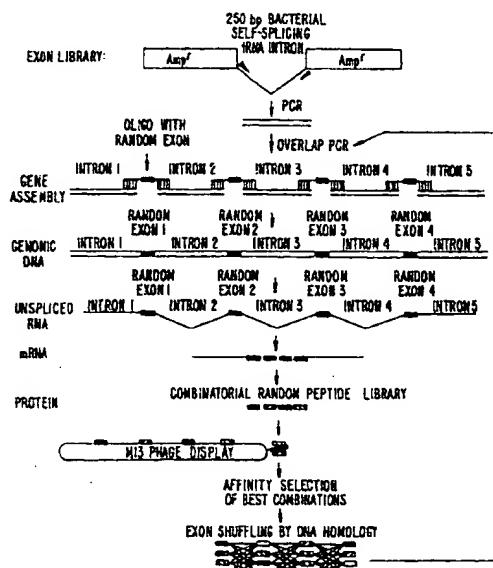


FIG. 20.

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## EUROPEAN SEARCH REPORT

Application Number

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EP 98 12 2014

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<small>EPO FORM 1603 03/92 (PAC01)</small>									
<small>X : particularly relevant if taken alone            Y : particularly relevant if combined with another                document of the same category            A : technological background            O : non-written disclosure            P : intermediate document</small>									



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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
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